

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H05K13/04 H05K13/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H05K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 01 241680 A (MATSUSHITA ELECTRIC IND CO LTD) 26 September 1989 (1989-09-26) abstract	1,3,4,6, 9
X	US 6 195 454 B1 (YAZAWA) 27 February 2001 (2001-02-27) column 6, line 27 -column 6, line 44; figures 1,3B	1,6
X	JP 07 283272 A (CITIZEN WATCH CO LTD) 27 October 1995 (1995-10-27) abstract	1,6 7

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the International filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the International filing date but later than the priority date claimed

- *T* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the International search

15 April 2004

Date of mailing of the International search report

26/04/2004

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INTERNATIONAL SEARCH REPORT

PCT/IB2004/050004

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 01241680	A	26-09-1989	NONE	
US 6195454	B1	27-02-2001	JP 3359246 B2	24-12-2002
			JP 9199898 A	31-07-1997
			KR 275829 B1	15-12-2000
			SG 72711 A1	23-05-2000
			TW 447227 B	21-07-2001
JP 07283272	A	27-10-1995	NONE	